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The Honey Product of 1881.

We have great pleasure in presenting to our readers a very interesting Table concerning the Honey Product of 1881. It is very valuable, and will be exceedingly useful for reference. It has entailed upon us much extra labor and study; but few can even imagine the amount of brain work expended upon such a table. It rolls up into the millions. We would thank those who have so kindly sent their reports, and thus gave us the material with which to make the figures.

The average amount of surplus taken from the hives during the past summer is about 69 pounds, and the increase is about 71 per cent. Some colonies have each given as much as 400 pounds of comb honey. These were very rare cases, and evidently had the most favorable conditions.

The increase varies all the way from 8 to 140 per cent. California shows 8 per cent. increase, while Dakota shows 130, and North Carolina 140, while New York and Kentucky each gave 72, Pennsylvania presents only 19. Michigan and Illinois each show 95, and Wisconsin 118. The curious may figure out many amusing results.

In the production of honey, New York takes the lead in quantity, followed by Pennsylvania, Canada, Ohio, Michigan, Wisconsin, Illinois and Louisiana, in the order named.

THE HONEY HARVEST OF THE YEAR 1881.

STATE.	No. of Colonies.		Per cent. Incr.	Extracted Honey.		Comb Honey.	Total Surplus Honey.	Ave. per Colony.
	In Spring.	In Fall.		Light.	Dark.			
Alabama.....	989	1,568	58	43,876	.....	3,240	47,116	48
Canada.....	12,251	23,432	91	894,502	4,511	274,612	1,173,625	96
California.....	480	520	08	30,168	.....	.....	30,168	63
Dakota.....	132	304	130	11,246	1,248	18,455	30,949	159
Florida.....	2,354	4,712	100	165,458	2,460	19,734	187,652	84
Georgia.....	2,480	3,648	49	89,450	.....	42,875	132,325	53
Illinois.....	7,739	15,111	95	151,212	26,343	202,081	379,636	49
Indiana.....	2,861	5,934	107	95,792	13,514	55,063	164,369	57
Iowa.....	4,577	7,642	68	117,946	57,655	103,956	279,557	61
Kansas.....	1,624	1,946	20	41,876	3,841	40,846	86,563	53
Kentucky.....	6,106	10,515	72	168,627	540	54,215	223,382	37
Louisiana.....	3,234	4,530	40	300,641	14,246	2,456	317,343	98
Maine.....	400	986	115	4,246	564	15,862	20,672	47
Massachusetts.....	1,549	2,675	73	40,828	2,524	78,281	121,633	78
Maryland.....	925	1,365	46	15,131	1,464	16,217	32,812	36
Michigan.....	11,366	22,173	95	127,926	8,713	755,375	892,014	79
Minnesota.....	2,624	4,346	66	68,694	2,482	56,357	127,533	49
Mississippi.....	3,245	4,321	33	61,750	11,240	19,465	92,455	28
Missouri.....	3,642	5,487	51	22,655	12,350	56,644	91,649	25
Nebraska.....	416	652	57	4,825	1,264	2,688	8,775	21
New Hampshire.....	98	146	49	2,655	564	1,582	4,781	49
New Jersey.....	2,260	3,465	55	45,428	12,816	24,860	83,104	37
New York.....	25,366	43,593	72	501,892	143,436	1,183,705	1,829,033	72
North Carolina.....	31	74	140	850	.....	1,456	2,306	74
Ohio.....	13,137	22,262	70	748,229	13,427	206,912	968,568	74
Pennsylvania.....	15,682	18,729	19	844,382	61,605	463,581	1,369,568	87
Tennessee.....	751	878	17	2,649	9,875	1,565	14,089	19
Texas.....	3,933	5,943	51	79,651	15,682	9,139	104,472	26
Vermont.....	446	679	55	4,681	1,856	27,158	33,695	76
Virginia.....	1,608	1,949	21	7,684	1,872	53,259	62,815	39
West Virginia.....	847	1,283	52	33,925	7,716	16,405	58,046	69
Wisconsin.....	4,423	9,642	118	217,351	97,142	182,424	496,917	112
	137,636	235,510	71	4,946,226	530,950	3,990,446	9,467,622	69

Dakota gives 130 per cent. of increase, and an average of 159 lbs. per colony in the spring, but more reports would, in all probability, greatly modify this result. New York shows a production of over a million pounds of comb honey, and is followed by other States in the following order: Michigan, Pennsylvania, Canada, Ohio, Illinois, Wisconsin and Iowa.

For several years past the crop has averaged only 35 lbs. to the colony, but this year we have nearly double (69 lbs.), so that those who lost 1/2 of their bees last winter, still have as much honey as usual from the half that remained last spring.

The 43 persons named below, commenced the season with 2,579 weak colonies. These have increased to more than double the original number, and have given 182,243 lbs. of extracted honey, and 95,144 lbs. of comb honey as surplus, besides leaving 100,000 lbs. in the 5,209 hives for winter use.

The average per hive, of honey produced is about 138 lbs., and the fall crop will bring this to over 150 lbs. per colony. The amount taken from each hive averaging 107 1/2 lbs. to every colony in the spring. Several of the colonies counted in the spring were devoted to queen rearing, and of

course gave no surplus. Here are the exact figures:

Name of Producer and State.	Colonies in Spring.	Colonies in Fall.	Pounds of Honey.	Comb Honey.
D. A. Jones, Canada.....	200	1,000	31,700	400
Alderman & Robt., Fla.....	230	330	10,390	1,850
B. F. Pratt, Illinois.....	24	44	3,000	100
Dr. C. C. Miller, Illinois.....	67	179	1,316	6,498
V. W. Keeney, Illinois.....	19	40	1,200	1,100
J. L. Anderson, Illinois.....	14	34	.....	1,000
J. Davis, Illinois.....	32	37	.....	1,500
A. H. Baker, Illinois.....	30	45	2,500	.....
L. H. Scudder, Illinois.....	15	40	.....	1,000
H. S. Hackman, Illinois.....	10	71	1,000	200
T. S. Bull, Indiana.....	140	230	8,150	700
J. S. Baileys, Indiana.....	13	34	1,700	.....
O. O. Poppleton, Iowa.....	108	131	14,400	325
A. Carder, Kentucky.....	28	38	2,500	.....
W. A. Towle, Michigan.....	31	50	250	2,214
G. Lamoreaux, New York.....	18	50	625	1,695
Hattie A. Heaton, N. Y.....	37	54	60	3,700
W. D. Wright, New York.....	140	210	.....	14,000
N. Bailey, New York.....	12	24	.....	1,100
W. L. Coggeshall, N. Y.....	108	206	15,100	4,500
W. S. Ward, New York.....	72	120	700	6,500
R. Bacon, New York.....	70	120	400	5,500
M. A. Williams & Co., N. Y.....	53	80	4,200	851
G. M. Woolver, N. Y.....	73	150	5,700	800
Jas. Markle, New York.....	83	115	10,800	800
Wm. P. Makley, N. Y.....	92	126	7,500	500
G. H. Adams, New York.....	30	107	1,000	2,000
J. M. Nipper, Wisconsin.....	30	80	700	3,200
C. J. Van Eaton, N. Y.....	41	125	400	3,000
Greiner Bros., New York.....	70	140	.....	9,100
P. A. Reigle, Ohio.....	2	15	362	201
E. M. Drury, Ohio.....	30	54	700	1,800
Smith & Smith, Ohio.....	30	70	.....	2,500
B. F. Carroll, Ohio.....	20	36	1,500	200
Wm. Bitzer, W. Virginia.....	42	58	2,785	1,300
H. Feathers, Wisconsin.....	35	38	1,000	3,200
James Nipe, Wisconsin.....	24	49	5,300	400
H. Newhage, Wisconsin.....	25	92	3,107	2,027
C. A. Hatch, Wisconsin.....	42	85	5,000	803
Smith & Hatch, Wisconsin.....	43	68	5,000	.....
E. F. Davenport, Wis.....	55	92	100	5,400
M. Blanchard, Wisconsin.....	31	73	6,500	100
	2,579	5,209	182,243	95,144

There are in America about 3,000,000 colonies of bees, but our reports are from less than a quarter of a million, or one-twelfth of the whole. If the

one-twelfth that are reported are a fair average of the whole, then the crop of American honey for 1881 amounts to 120,000,000 of pounds. If we call it only a hundred millions, it is worth \$1,500,000,000. Surely the industry is of sufficient magnitude to satisfy the most enthusiastic of its devotees.

The National Convention.

We devote much of our space this week to the first instalment of the proceedings of the National Convention, held last week. The Convention embraced much talent, and its deliberations were marked with dignity and harmony, and will be productive of much good.

Prominent among those in attendance were: Prof. A. J. Cook and T. F. Bingham, Mich.; Hon. W. H. Andrews, Texas; G. W. Baker and A. W. Windhorst, Mo.; Geo. A. Vincent, La.; Dr. J. P. H. Brown and lady, Ga.; Mrs. L. Harrison, Ill.; Mrs. F. Dunham, Wis.; F. Della Torre, Md.; D. A. Jones, Ontario; Nelson Perkins, Ala.; D. S. England, Tenn.; O. O. Poppleton, Iowa, Dr. E. Parmly, N. Y., and a host of Kentuckians.

Much of the success of the Convention is due to the unceasing labors of Mr. and Mrs. William Williamson, and Mr. J. R. Williamson, whose unbounded hospitality will not soon be forgotten. That they may prosper as they deserve, is the wish of all with whom they came in contact.

A mild winter, says the Cincinnati Commercial, is predicted by meteorologists. As the excessive heat of this summer is attributed to the increase of solar radiation, and that increase is due to violent disturbances in the sun's chromosphere, where spots of vast magnitude, following a period of quiescence, began to show themselves in May and have continued since, it is argued that the temperature in Arctic latitudes is, and will continue to be, above the average, and that comparatively mild currents of air will be wafted down upon us during the winter months.

We regret to announce that Signor Lucio Paglia, an extensive breeder of Italian bees, who has exported many of them to other countries of Europe as well as to America, died at Gaiana, of an affection of the lungs, on the morning of Sept. 15, 1881.



TWELFTH CONVENTION OF THE North American Bee Keepers' Society

HELD IN THE
Odd Fellows' Temple, Lexington, Ky.,
COMMENCING ON
WEDNESDAY, OCTOBER 5, 1881.

President N. P. Allen called the Convention to order at 10 o'clock.

C. C. Coffinberry, of Chicago, Ill., was appointed Recording Secretary *pro tem*.

On motion, the reading of minutes of last Annual Convention was deferred till the arrival of Dr. Parmly, of New York, Recording Secretary.

An amusing communication from B. Hix, Holly, Mich., was read.

Calling the roll of members and reading the Treasurer's report were deferred.

Vice Presidents' reports being in order, the following were received:

Tennessee.—Vice President S. C. Dodge reports the winter of 1880-81, was one of unusual severity; the spring opened fine but late; bees were too weak to take advantage of nectar flow from fruit trees, white clover and tulip trees; my average being about 25 pounds of honey from spring bloom. The summer was dry and forage very poor. Colonies robbed late in spring scarcely recovered in time for fall bloom. Now breeding rapidly from fall honey. Honey is now coming in nicely. I expect an average of 30 pounds of fall honey per colony. I have effectually eradicated foul-brood from my apiary; and after disinfecting them am again using the hives and frames.

Arkansas.—Vice President W. W. Hipolite, M. D., reports only about 25 pounds per colony, owing to the prolonged drouth; increase was moderate; bees are in good condition. Instead of organizing State and district associations, I have made formal application to have the bee-keepers in this State incorporated with the Arkansas State Horticultural Society for the time being, and have no doubt that the request will be granted. With some slight changes, our State Fair Association will continue the premium list which they last year offered for bees, honey, etc. The fair will be held from the 17th to the 22d of October. As bee-culture becomes better developed in this State, I think there will be little difficulty in getting an offer of larger premiums. I trust your meeting may be one of harmony, and result in great good.

Indiana.—Vice President Rev. M. Mahin reports the winter of 1880-81 was one of the most disastrous to the bee-keeping interest since I have been a keeper of bees. In all parts of the State the losses were very great, and in some counties almost total. For some reason which I am not able to explain, the mortality was greater in the Southern portion of the State than in the more Northern. I am not able to give with any certainty the percentage of loss, but I judge for the whole State it was not less than three-fourths. Many lost all they had. In the Northern half of the State the season has been very good. I have never before known basswood to yield so abundantly. The swarming fever ran very high, and those who were wise enough to save and use the combs of the bees that died, or to use comb foundation, have had a very satisfactory increase. In this, the northern central portion of the State, the generally prevalent drouth did little harm, and our bees have gathered honey all the season. The fall crop is light, but the early crop was so very large that we have abundant reason to be satisfied. In Southern Indiana

the drouth has been very severe, and I suppose that the bees are not in good condition for winter. In this portion of the State there is great room for improvement in bee-culture. So far as I know, I have the only honey extractor in this county, and good movable-comb hives are scarce. Bee-keeping has been damaged by vendors of patent bee hives, the patented features of which are their worst ones.

Georgia.—Vice President Dr. J. P. H. Brown reports that as there are no regular statistics kept by the Agricultural Bureau of Georgia of the number of colonies of bees, and of the amount of honey and wax produced, it is very difficult to arrive at any very accurate results. I can only give approximate estimates based upon the last report of the Commissioner of Agriculture upon the subject. I place the number of colonies at about 7,000, and the honey product at 144,000 pounds, which would only be 20 lbs. per colony. The season has been favorable for the flow of honey, and above an average. The most abundant yield was in May, after this the drouth set in which checked the flow until the rains in July. The fall harvest bids fair to be good, and all those colonies that are strong will lay up surplus above their winter supplies. I estimate the amount of beeswax at 8,000 pounds. Fully 80 per cent. of the bees are kept in the old-fashioned box-hives. Movable-frame hives are gradually coming into use, and will be more extensively used as correct apian knowledge is more disseminated.

Kentucky.—Vice President Wm. Williamson reports the losses the past winter in Kentucky at fully 50 per cent.; some appear to have been more successful than others, and it does not appear to have been from lack of scientific treatment, because those who have the least experience, or given the least attention to them, have in some instances been most successful. The long-continued drouth of this summer destroyed the bright prospects of the early honey season. The flow of honey for a week or two was abundant, rich, and of delicious flavor, and for the number of colonies would yield about 75 per cent. The increase in colonies has been fully 100 per cent. The prospects for next season seem to indicate a bright future. The recent rains have refreshed vegetation so much that bees are again gathering honey, and will go into winter-quarters well supplied.

Canada.—Vice President D. A. Jones reports the present season as an average one for both honey and increase, and although it has been very dry since July, completely cutting off the fall honey yield, bees are in fair condition for wintering. Honey sells readily at fair prices, and the outlook for bee-keepers was never brighter in Canada than at present.

Nebraska.—Vice President Geo. M. Hawley reports the losses from outdoor wintering at fully 75 per cent.; the losses from cellar wintering 10 per cent. The early season proved favorable, and bees increased rapidly. Later, some sections were affected with local drouths, and but little surplus was obtained, while other portions will secure a full harvest. Should estimate the crop of the State at $\frac{3}{4}$ of a full yield. Our principal yield of honey has been from Polygonum persicaria (hearts ease), goldenrods and silkweed. In the vicinity of rivers or creeks much other bloom has aided, but the former are everywhere present. The quality of the honey is good, and bees are generally in good condition for winter.

Alabama.—Vice President James A. Austin reports: I have endeavored to find out all I could in regard to honey and bees in this State. I think I can safely say there are not more than 200 or 300 colonies in Madison county. There is very little interest manifested in the State. I am sorry I cannot be with you at the Convention, and hope it will prove a successful one.

Maryland.—Vice President S. Valentine reports: I regret I have not been able to get the statistics of the State of Maryland. As far as I can learn, I cannot report much over half a crop of honey, if any, for the State of Maryland for 1881. Owing to the mortality among the bees last winter, and the irregular flow of honey this season, it is impossible even to approximate an estimate of the honey crop of our State. I learn from various correspondents in different localities, that the flow of honey has been very irregular through the State—some sections very good while others are poor. I am of the opinion that the clover all through the season secreted an abundance of honey, throughout the State, and the failure in the different localities was owing to the prevalence of heavy rains in the early part of the season, which washed the honey from the blossoms. Following are statistics for Carroll county for 1879: Honey, 13,977 pounds and wax, 455 pounds. Taking Carroll as an average, would give the State of Maryland 307,497 pounds of honey and 10,010 pounds of wax for 1879. I trust your Convention may be a grand success.

Kansas.—Vice President Norton reports there is no surplus in Kansas, unless it be in the Eastern tiers of counties along the Missouri river. Any surplus in his locality is usually from the fall flowers, which the drouth has prevented for this season. It seems to me a printed circular, setting forth the objects of the Society, for distribution by the Vice Presidents among the officers of the various Fair Associations, would be the most practical and effective manner of reaching the intended objects and producing an effect. It should be an able production, giving statistics of the production of honey, and its importance to the country in a commercial view, with reasons why that production should be stimulated and encouraged by the offering of liberal premiums by the several Fair associations of the country. I would suggest that Mr. T. G. Newman be requested to write it. He could certainly afford it, as the extension of scientific bee-culture tends to increase the circulation of the BEE JOURNAL. Since my residence here, now four years, the JOURNAL has quite a good circulation, whereas, before I came, not a copy came to the county so far as I know. I wish the Society a successful and profitable meeting.

The reports were accepted and ordered to be placed on file.

On motion, the reception of the President's annual address was postponed till the afternoon session.

On motion, adjourned till 2 p. m.

AFTERNOON SESSION.

The President, Dr. N. P. Allen, of Smith's Grove, Ky., addressed the Convention as follows:

Ladies and Gentlemen:

In obedience to a time-honored custom, I am before you to deliver the opening address as presiding officer.

Another year of labor and toil, of joys and sorrows, of successes and disappointments, has passed since we last met in council and grasped each others' hands, and with sympathetic hearts enjoyed the social greetings of our co-laborers in the broad field of apiculture. We have great reason to be thankful to Him who presides over the universe, the dispenser of all blessings, that our lives are spared and we are so favorably surrounded.

The past winter was marked by extreme long-continued cold, and thousands of colonies of bees were lost in consequence; not only bees died, but animals perished in many parts of our northern latitudes; nor was man altogether exempt from suffering and death caused by the rigorous weather.

But in due time the spring sun poured its life-giving rays upon the earth, melting away the snow and frost. The trees put forth their leaves, the grass shot forth its delicate spears and covered the earth with living

green; the flowers opened and filled the air with sweet fragrance, and all nature seemed glad with joy, while the hum of the busy bee was heard in the land, filling the heart of the bee-keeper with delight as he beheld the lovely sight.

But the spring-time and summer have passed and the harvest is ended, and we are here to recount our successes and failures—to learn one from another.

Life is made up of toil and labor, of pleasures and sorrows, hopes and fears, happy realizations and sad disappointments—not more so with the apiarist than with other pursuits; yet, he has a fair field in which he can experience all these different phases of life.

The object of this Association should be to disseminate a correct knowledge of rational bee-keeping; to bind the brotherhood of bee-keepers together as with cords of love and fraternal feeling; to do all in their power to develop the honey resources of the country; to let their light shine so that ignorance and superstition may be dispelled from the land, and a correct system of cultivating the honey bee be the order of the day, that all who keep bees may be rewarded for their labor, and by studying the works of nature in the economy of the bee hive, be elevated in their minds from nature's works to nature's God, and thus be made better citizens and better Christians.

I had hoped to have a valuable statistical table from every State and Province; but from causes over which I had no control I am not able to present it.

Many and varied are the reports of the honey crop. In some States and localities the winter's disasters and the summer's drouth have been so severe as to almost ruin bee-keeping as a profitable business, while in other States and localities bees wintered without serious loss, and the spring and summer harvests were such that good crops of honey were gathered; and in favored spots large yields of honey are reported. May we not hope for a favorable winter, and a rich harvest for our bees the coming year?

Since the invention of the movable frame, by our illustrious co-laborer, the Rev. L. L. Langstroth, in 1855, scientific bee-keeping has been on the increase, and the command of God to man to go forth and subdue the earth, is the watchword among bee-keepers—as the movable frame gives him control of the labors of the honey bee in comb-building, brood-rearing and honey-gathering. The intelligent bee-keeper directs the labors of his bees as he chooses. If he wants the delicate comb honey, as white as snow, he can have it by the use of honey boxes and sections; if he wants the pure liquid nectar just gathered from the delicate flower cups, with the sweet fragrance and rich aroma of the flowers from which it was gathered, he can obtain it by the use of the honey extractor. If he wishes to increase the number of colonies, he can do it by artificial swarming and the use of comb foundation. The bellows smoker enables us to subdue and control our bees while manipulating them.

The new races of bees that have been introduced have done much to further the cause of scientific bee-culture. All of the different races are here on exhibition, and we may learn much of their relative merits. We have the German or black bee, the graceful Italian with her rings of gold, and the albino, so light and beautiful. The Cyprian and Syrian bees that have recently been introduced from the Island of Cyprus and from Palestine are also on exhibition. We had hoped to have *Apis dorsata* also, but have not.

I would earnestly recommend for your consideration, the importance of encouraging State, District or County Societies; the State or Province Societies should be auxiliary to the North American, and the District or County to the State or Province.

Much has been said and written on the subject of the adulteration of honey, and the making of laws to pro-

hibit it. I believe that all articles of food and medicine should be sold under their proper names, and as honey is used both as food and medicine, I recommend that you take such action as in your wisdom may seem best to bring about the end desired.

Several valuable inventions in useful tools and implements have been made the past year, and quite an advance in our bee papers and literature is to be seen—new ones being issued, older ones enlarged and made more attractive. The AMERICAN BEE JOURNAL, published by Thos. G. Newman, Chicago, Ill., is now printed weekly, and is the only weekly paper in the world devoted exclusively to bees.

I return thanks to all the bee papers for publishing the notice of this meeting; also to the committee of arrangements, for their labors in getting the use of this hall to hold our sessions in, and for obtaining hotel and railroad rates.

A programme has been printed and distributed for use at this meeting; I return my thanks to all those who have contributed to its interest.

In conclusion, allow me to thank you for the honor of presiding over your Association the past year. I have spent both time and labor in furthering its interests, with the hope that it would prosper under my administration, and that this meeting would be the best ever held in the Western World. May your deliberations be pleasant and profitable to all present.

Dr. E. Parmly, of New York, Recording Secretary, having resumed his official duties, read the minutes of the last annual Convention, which were approved.

The selection of a committee on nominations being in order, O. O. Poppleton, Iowa, moved that the President appoint the committee. Carried.

President Allen appointed as said committee: Hon. W. H. Andrews, McKinney, Texas; Hon. G. W. Demaree, Christiansburg, Ky.; O. O. Poppleton, Williamstown, Iowa; F. Della Torre, Reisterstown, Md.; and Dr. J. P. H. Brown, Augusta, Ga.

Prof. A. J. Cook, of Lansing, Mich., delivered the following able address:

The New Races of Bees.

A little less than two years since, as is well known to all, two American gentlemen D. A. Jones, of Canada, and Frank Benton, of Michigan, started for the old world in quest of new races and species of bees. In the hope that they might discover and introduce into America some new and valuable races or species. After visiting the principal apiaries of Europe, they located in Cyprus, where they established a large apiary in the city of Larnaca. Mr. Benton remained in Cyprus in charge of the bees, which consisted of two distinct varieties, the Cyprian and the Syrian, while Mr. Jones returned to America in June, 1880, bringing a large number of the queens of the two races with him.

The following winter Mr. Benton proceeded to Ceylon and Java, hoping to find "the great bee of Java," *Apis dorsata*, and perhaps others that were valuable. His quest on the island of Java was very thorough, but utterly fruitless. No sign could he see or word could he hear of the great "Javan bee," *Apis dorsata*. It was not there, and Mr. Benton gained the expensive information that the name Java, as applied to this species, was a serious misnomer. His search in Ceylon, however, was better rewarded, as he procured on this island, after severe labor, great privation, and serious hardships, which came near costing him his life, two new species of *Apis*; the large *dorsata* which fastens its immense combs, all exposed, to the underside of the branches of trees; and the minute *floreana*, which nests in the hollows of trees and rocks, as do our common bees. The comb of *Apis dorsata* is very thick and heavy, while that of *A. floreana*, some of which I have received through the kindness of Mr. Benton, is very delicate and beautiful. The cells are $\frac{1}{2}$ less in diameter than are those of our common bees.

Upon the arrival of the new queens in America, I at once procured one of the Syrians, and Syrianized the entire apiary at the Michigan Agricultural College, as I then could learn their peculiarities with much more certainty than though I kept several races.

As the Syrian is the only one of the new races and species with which I have had

personal knowledge, I will confine the balance of this paper to them, reserving the description of the other species and race for a future occasion.

The Syrian bees are of the yellow type, and so are closely related to the Italians. Indeed, there are reasons to believe that these latter bees are the modified off-spring of the Cyprians, which as probably were the descendants of the Syrians.

The queens of this race are remarkably uniform in coloration, and thus appear more fixed as a variety, than do the Italians, whose queens are quite variable in color. This uniformity is so striking that of 20 Syrian queens which I have reared, it is next to impossible to distinguish one from another. The head, thorax, femora, and bands on the dorsal surface of the abdomen are black. The abdomen above is brown or leather-color, while the legs, except the femora, and the under side of the abdomen are a little lighter. The black bands on the back border posteriorly the segments from the 2d to the 5th inclusive. They broaden from before back to the last, which nearly covers the 5th segment. The 2d and 3d bands are a little broader in the middle, and the last segment is wholly black. In form the Syrian queens are essentially like the Italians, nor do they differ in size.

The drones are black above and yellowish-brown beneath. The legs are black. Each segment of the abdomen is bordered above posteriorly with golden brown. Olive brown hairs cover the thorax above, while beneath the thorax on the under side of the head, and at the base and tip of the abdomen, the hairs are of a lighter hue. These drones are also unlike the Italian drones in their wondrous uniformity. Each seems exactly like every other. The Syrian and Italian drones do not differ in form and size. In breeding these bees, I have had striking proof that impregnation has no effect to modify the drones. The first 4 queens that I reared must have mated with Italian drones, as there were no others in the apiary, and no Syrian drones in the State. Yet of a great number of drones from these queens, not one was seen that did not show the marks of a pure Syrian in every respect.

The Syrian workers are like those of the Italians, except that they are more yellow beneath; this color prevailing to the last segment which is dark. The young Syrians, just as they come from the cells, appear very dark. This peculiarity furnishes the readiest means by which to identify these bees when there are no drones in the hive. The workers are a little brighter than are the Italian workers, and perhaps a trifle smaller. The tongue of the Syrian worker, I find, after examining a large number of each kind, to be the same length as that of the Cyprian, and to average .006 of an inch longer than that of the Italian, and more than .03 inch longer than the tongue of the German worker.

I have found the Cyprian bees to be very prolific, and persistently so. Autumn frost or summer dearth of honey secretion does not check brood rearing as is the case with the Germans or Italians. This does away with all need of stimulative feeding, and keeps the colonies strong at all times. Young bees are present at dawn of winter, which is an important adjunct in safe wintering, and a safeguard against spring dwindling. The Syrians are excellent honey gatherers, certainly equal, if not superior to the Italians. They are even more sure to repel robbers than are the Italian bees.

Some of the characteristics of the Syrians are not so desirable. They fairly crowd the queen cells when preparing to swarm. Sometimes 5 or 6 queen cells will be massed in one great pyramid; so it is often difficult to separate them without ruining large fine cells. The speedy destruction of the remaining queen cells after the first queen comes from the cell, and the quick appearance of fertile workers in queenless colonies and nuclei, are objectionable features. These bees are more irritable than are Italians, and worst of all when once aroused, they are totally indifferent to smoke and fight on all undismayed, even in the presence of the best Bingham smoker. This objection is not very serious, however. The bees are breeding at all times, and so are almost always peaceable, so much so, that I have handled them now for a year, without gloves, veil or smoke, and with no fear or annoyance, except in case of colonies or nuclei which had no queens. Queenless colonies are often very irritable. By waiting a little after opening the hive we are safer, but even then it is not always agreeable to handle them without full protection. Fortunately it is not necessary to handle them much at such times. It is much easier to protect fully these few times, than to have to use the smoker most of the year. After a year's experience, I can give hearty praise to these bees, which are certainly a most valuable acquisition to American apiculture.

Rev. L. Johnson, of Walton, Ky., thought orders for Cyprian and Syrian queens should be sent to Mr. Jones, in order to remunerate him in part for his outlay of time and money to secure a superior and pure race of bees for dissemination in this country. The bees mentioned are good natured if properly handled.

Prof. Cook thought a substantial recognition of Messrs. Jones and Benton's arduous and hazardous labors in this behalf should be made by the bee-keepers of North America.

G. W. Demaree, Christiansburg, Ky., was satisfied that there are two races of bees—the yellow and black. All the races of yellow bees are undoubtedly derived from the same parent stock, and all variations which are apparent are the result of climatic influences. Mr. Demaree said he had better results in rearing queens from fresh eggs than from larvae. He found, where giving larvae already hatched from which to rear queens, the queens are always darker and their workers not so fine.

D. A. Jones, was of the opinion there were but two races originally—the Syrian and the Dalmatian bees. He thinks the Syrian bees were taken to Cyprus from Palestine, and from Cyprus to Italy, where they came in contact with the Dalmatians, and by acclimatization they formed the present Italian bees, which have become a fixed race. He has known nearly 250 queen-cells to be constructed in one hive by the Cyprians. A neighbor in Canada claims that the Cyprians gathered an average of 20 pounds more honey per colony than the Italians did.

C. C. Coffinberry, Chicago, Ill., read a paper on the subject, "Can we make honey a staple product?" as follows:

Can Honey be made a Staple Product?

Since bee-keeping has emerged from the mysterious labyrinth of superstition which popularly surrounded it and been allotted a high position among the scientific arts, the great obstacle which, till quite recently, attended its successful pursuit and development has been an outlet or market for the surplus production above the quantity actually required for home consumption.

This, however, having been overcome, the next serious question which arose in the minds of some of our most successful producers was the fear of glutting the market; but thanks to an intelligence which could comprehend a country and a market as great as our own, this fear has been allayed, and a demand has sprung up abroad which we frankly acknowledge we cannot satisfy, until we can make honey a staple production. By "staple production," I mean when its supply will average, one year with another, as will pork, or beef, or butter, or cheese, or wheat, or corn, or any other product that is dependent alike upon the seasons and the intelligence of the producers.

Contemporaneous with the fear of glutting the market, was broached the bugbear of over-stocking the country with bees, and many intelligent and deeply interested bee-keepers approached the subject with fear and trembling, while a few proved by actual figures that two or three hundred colonies of bees did not gather as much honey per colony as formerly did their half-dozen or less colonies. Last winter, however, done much to remove their fears of over-stocking; in fact, one advertised this spring to buy or run on shares bees with which to continue his over-stocking process.

The all-important questions now arising are, Can honey be made a staple product? and if so, how? If we were to ask an intelligent pork-raiser where he expected his hogs to find mast enough to fatten on, he would smile at our simplicity, and point to his well tilled fields where he raised the corn to feed them; ask the dairyman how he expects the best results from his cows in butter and cheese, and he will point to his ample pastures and haystacks; inquire of the wheat-grower where he finds so much wheat to cut, and he will with pride show you his broad fields; but the average bee-keeper if asked where his bees get the nectar with which to fill their surplus boxes, will with a smile of satisfaction point to the roadside where abounds what of the clover the hogs have not uprooted, or to the linden grove in somebody's wood-lot, or to some slovenly field where Spanish-needs have taken possession, or "over yonder is a marsh with lots of smart weed." But he has never planted an acre for his bees,

"because it will not pay." Perhaps, once in a while, some neighbor has put in a field of buckwheat, or nature has been lavish, and the bees, true to instinct, have done well—as they always will if the opportunity is provided them.

But Mr. O. O. Poppleton, of Iowa, can tell you truthfully that his bees average, per colony, the product of an acre of wheat; Greiner Brothers, of Naples, N. Y., realized equivalent to two acres of wheat from each colony; Alderman & Roberts, Wewahatchka, Fla., have realized this season enough to purchase an acre of land for each colony. Many others have done quite as well; and why? Because they have had almost continual bloom.

It is not my intention to suggest what to plant, but to provoke the questions: Should we not plant to secure a continuous bloom? and with a continuous bloom of judiciously selected plants, can we not make honey a staple product? When every year becomes an extra good honey season, instead of every fifth year, will not honey have become a staple product? If thirty days of good honey flow will constitute the average honey season one with another, will not four times that number of days every season (which I believe can be realized by judicious planting), not only make the product a staple one, but apiculture will become one of the most pleasant, most certain, and most profitable pursuits we can adopt.

When we have learned what to plant, when to plant, and how much to plant, then, too, will we have overcome the greatest difficulty in wintering, and we will hear no more of bees starving. Our honey will always be the best, because we have robbed nature of the privilege of making the selection. Our colonies will always be strong, from early spring till late in the fall, for we have allowed no cessation in honey flow. Our ramifications for newer and better bees will cease, for our beautiful American-Italians will only be forced to "jump over the fence and help themselves;" and our hybrids and blacks will become morally and socially better, because not forced from infancy to steal their living. Then, too, will prices become as staple as the product, and the apiarist can with some certainty figure up his probable profits; a few days of adverse winds will not ruin a season's prospects, and bee-keepers will expunge from their vocabulary the dismal term, "blasted hopes."

T. F. Bingham, Abronia, Mich., inquired of Mr. Coffinberry how much buckwheat would be required for a given number of colonies?

O. O. Poppleton, Iowa, answered the question by stating that last season 25 acres of buckwheat gave his bees 6,000 pounds of buckwheat, and he does not know how much was lost, because of inability of bees to take care of or gather it.

Prof. Cook said that the subject matter of the paper was of the greatest importance to the bee-keeper, as it touched on all the vital points connected with successful apiculture; he had no doubt the honey season could be very greatly lengthened, and the crop increased almost indefinitely by a judicious system of planting. He hoped every bee-keeper in America would give the matter of planting for honey a generous trial.

On motion, the President appointed the following gentlemen as a committee on apiarian supplies, queens, bees, etc.: Dr. L. E. Brown, Eminence, Ky.; D. A. Jones, Beeton, Ont.; and D. S. England, Sparta, Tenn.

The following communication was read from Henry L. Jeffrey, Vice President for Connecticut:

Report from Sept. 1st, 1880, up to date.

The honey yield from fall flowers in 1880 was below the average as a crop, and consequently the condition of colonies for winter, in the majority of cases, was a scant supply of honey. The pollen yield was as much in excess as the honey was deficient, and in many places the pollen yield was the heaviest ever known.

Winter came suddenly upon us, about Nov. 23, and held severe until Dec. 13, when the bees that were in sheltered localities flew a little for two or three days and were then shut in until the fore part of March, when they had another fly for a day or two, then, having only an occasional fly until May, when they began to work in earnest every pleasant day, carrying in pollen, and the bees decreased in a greater proportion, by the old ones wearing out, than the hatching brood could replace, thus leaving the colonies on the average no stronger than they usually were the fore part of April.

About 65 per cent. of the number of colonies of last fall were dead by May 10, and more of them died between Mar. 20 and May 10 than had previously. Many that had pulled through till May 1, became queenless and died out or swarmed out, or had drone-laying or virgin queens before June 1.

Both soft and hard maples were full 3 weeks later than known before in these parts, but most of the bees were in condition to obtain but little honey from either. Fruit bloom was nothing to speak of. May 25, white clover began to show considerably in favorable localities, but yielded very little honey. Very little, if any, surplus was stored in boxes till basswood, which commenced blooming July 13, the bloom being plenty and yielding bountifully till the 28th; before basswood was gone, sumac began to bloom abundantly, and yielding honey steadily and bountifully till Aug. 5, when the harvest shut off so abruptly as to make it dangerous to open weak colonies or nuclei until buckwheat began to bloom, which was Aug. 22, in some places yielding a fair supply, in others scarcely enough to keep off starvation, and in many places not any. When any amount of honey was gathered it was from the silverhull, the common kind was worthless for honey. The early golden-rods and other early fall flowers amounted to nothing for honey; on the 20th of Sept. bees began to gather a little honey, and the yield showed a steady increase daily. On the 24th it was so heavy that should it continue for 2 weeks as plentiful, the colonies completely destitute could gather enough for a winter supply. The queens had almost come to a stand-still regarding laying, but the past 3 or 4 days, good flow of honey has given them a start, which it is to be hoped will furnish brood enough to send them into winter quarters moderately strong in bees.

In the north-western and western parts of the State, there is a slight showing of a disease in the brood. Just before ready to cap, a large percentage of it turns a yellowish brown, and then dries up. Whether it is caused by a poisonous honey, or the weather, or the drouth, or all three, I cannot tell. The trouble is mostly on low ground or near large swamps. It is contagious by the interchange of diseased combs.

The honey season has not been more than a medium for surplus, though in some places it was uncommon for swarms.

Woodbury, Conn., Sept. 26, 1881.

On motion, adjourned till 7:30 p. m.

EVENING SESSION.

Reports on the crop results for the season, with amount of increase, being in order, were given as follows: No. of colonies in the spring, 1,499, increased to 2,700; extracted honey received, 67,632 pounds; comb honey received, 5,005 pounds.

Many of those reporting as above stated their bees were in bad condition in the spring, and others had run for queens or increase. When the roll was called several were absent, not having returned from supper.

Prof. Cook made an explanation regarding fertilization in confinement; he has never been successful in his attempts to accomplish it, although he has diligently tried almost everything which suggested itself to his mind.

Mr. Demaree has tried several experiments, and almost lost confidence in its accomplishment. He has tried tying a silken thread around the queen and flown her in the air, but with no satisfactory results.

Prof. Cook has also tried that method, and suggested several other experiments which met with no better success.

Several gentlemen expressed the opinion that the queen and drone dropped to the ground during intercourse, and gave instances which had come within their knowledge.

Dr. J. P. H. Brown differed with the gentlemen; he thought a few exceptional cases did not constitute the rule.

Mr. Jones has had a Syrian queen mated after she was 30 days old, and she commenced laying three days after being put in the hive. She has proven herself a good queen, being prolific and throwing worker brood.

On motion of Wm. Williamson, Lexington, Ky., Dr. J. P. H. Brown, Prof. Cook, G. W. Demaree, D. A. Jones and Prof. Hasbrouck, of New Jersey, were appointed a special committee, and requested to continue further experiments with a view to success-

fully fertilize queens in confinement.

D. A. Jones suggested that bees could be successfully and quickly united by using a small Bingham smoker with a piece of fine sponge next the fire grate, then another piece saturated with the best German chloroform, and a dry sponge on this. Care must be used, not to use too much chloroform.

Adjourned till 9 a. m.

MORNING SESSION—OCT. 6.

Session opened with prayer by Rev. L. Johnson, Walton, Ky.

Report of Committee on Nominations being called for Hon. W. H. Andrews, Chairman, reported the following:

President—Prof. A. J. Cook, Lansing, Mich.
Recording Sec.—Dr. Ehrick Parmlay, New York.
Corresponding Sec.—C. F. Muth, Cincinnati, O.
Treasurer—Mrs. Frances Dunham, Depere, Wis.

STATE VICE PRESIDENTS.

Alabama—J. A. Austin, Huntsville.
Arkansas—Dr. W. W. Hipolite, Devall's Bluff.
California—W. Muth-Rasmussen, Independence.
Colorado—D. Wolpert, Denver.
Connecticut—H. L. Jeffrey, Woodbury.
Delaware—Calvin G. Shaw, Vermillion.
Florida—W. S. Hart, New Smyrna.
Georgia—Dr. J. P. H. Brown, Augusta.
Illinois—Mrs. L. Harrison, Peoria.
Indiana—Joseph M. Brooks, Columbus.
Iowa—O. O. Poppleton, Williamstown.
Kansas—D. P. Norton, Council Grove.
Kentucky—W. Williamson, Lexington.
Louisiana—G. A. Vincent, New Orleans.
Maine—Dr. J. A. Morton, Bethel.
Maryland—S. Valentine, Double Pipe Creek.
Massachusetts—E. A. Thomas, Coleraine.
Michigan—T. F. Bingham, Abonia.
Minnesota—O. M. Blanton, Greenville.
Missouri—R. S. Musser, St. Joseph.
Nebraska—George M. Hawley, Lincoln.
New Hampshire—J. L. Hubbard, Walpole.
New Jersey—Prof. J. Hasbrouck, Bound Brook.
New York—A. J. King, New York City.
North Carolina—E. E. Ewing, Highlands.
Ohio—Melville Hayes, Wilmington.
Ontario—D. A. Jones, Beeton.
Pennsylvania—W. J. Davis, Youngville.
Quebec—Thomas Valiquet, St. Hilaire.
Rhode Island—W. H. Murrell, Woonsocket.
Texas—Dr. W. Howard, Kingston.
Vermont—A. E. Manum, Bristol.
Virginia—E. C. Jordan, Stephenson's Depot.
West Virginia—E. E. Ewing, Wheeling.
Wisconsin—John Corcoran, Madison.

The report of the committee was accepted, and on motion of O. O. Poppleton, the Recording Secretary was instructed to cast the vote of the Convention as a unit for the above nominees, after which they were declared unanimously elected.

Prof. A. J. Cook, President elect, was escorted to the chair, and delivered the following:

President's Address.

Ladies and Gentlemen of the American Bee-Keepers' Society:

Allow me to thank you most cordially for this unsought and unexpected honor. To receive this kind and unanimous expression, is indeed most pleasant. Two years ago I urged Cincinnati as the place for the succeeding meeting. I wished to enlist the interest and quick intelligence, and secure the rich fruit of the experience of our honored bee-keepers of the Sunny South. One year later the selection of Lexington wisely furthered the same object. To-day we are proving the wisdom of this idea. We have heard before of the kind-heartedness and exceptional hospitality of the people of this grand old State. To-day we are realizing that it is more than true.

I have long felt a sincere pride in doing what I could to advance apiculture. The apiarist procures his reward, not by sharp practices, not through the misfortunes and adversity of his fellow, but by the honest production of that which is of value to others. His daily work adds to the capital of the world; the fruits of his daily thought and labor add to the comfort, the health, and the happiness of the world. More, when we lead any friend or neighbor to apicultural pursuits, we are working indirectly to cultivate in them thought, study and close observation, for without each and all of these, the best success is impossible. But intelligence and observation are more than elements of success; they make life a joy, and their possessor a delight and a blessing to others.

Apiculture calls its patrons to handle the things of nature, and so refines, elevates, and broadens. How patent the fact, as we associate with bee-keepers in these conventions, that this pursuit develops charity, rever-

ence—yea, the truest and best elements of a gentleman.

In apiculture, our sisters find the means to procure a comfortable livelihood. That apiculture is peculiarly adapted to the deft manipulation and the neat and beautiful taste of our ladies, is more than demonstrated by the many successful lady apiarists of America, who are second to none in the land.

To be called to succeed such men as Allen, Newman, Quinby, and the honored Langstroth, is indeed something to awaken pride; to be called to represent the American apiculturists, as the chief officer of their national association, is indeed an honor of no small magnitude.

Asking your aid, unflagging support, and your kind forbearance, I promise to do what I can to make the coming year of this association even more fruitful of good to American bee-keepers, if that be possible, than has been any time of the past. With "Excelsior!" as our motto, let us proceed to our regular work.

The following resolution was offered by C. C. Coffinberry, of Illinois, and adopted unanimously, by a rising vote:

Resolved, That we hereby tender the thanks of the North American Bee-Keepers' Society, to our late President, Dr. N. P. Allen, Kentucky, for the excellent and efficient discharge of his official duties during the past most trying year to bee-keepers.

The following address from P. P. Collier, of Missouri, was read:

About in-and-in-Breeding.

In discussing this very important branch of apiculture, I deem it prudent to confine myself to facts long established and proven, that too long and too close "in-and-in-breeding" is detrimental in all domestic animals, as well as the honey bee. It is one of God's established laws in all animate beings to avoid the relative or kindred bloods, and the penalty in the violation of this law, the careful breeder is ever watchful to prevent in the species propagated. While it is a fact that some of the ancients advocated "in-breeding" to retain the original purity of the "bovine animals," yet the proof of this policy is developed in all cases wherever practiced, not only in maintaining the original, but running out of mixed bloods, and, while we believe that this law is applicable to all domestic animals, it is none the less true in the honey bee, as probably with all insects.

My father once purchased 4 colonies in log gums from two different men. For 2 years his increase was very rapid, his bees doing well, but the third year they became indolent—no honey—moths attacked them, and in 2 years more he had nothing left save the "gums." There were no other bees near for them to cross with, but they bred in-and-in until they bred "out." I was called, a few years ago, to transfer 18 black colonies from the old box to the movable frame hives. I did so, and found the bees very indolent; queens and drones dwarfish, bees idle with little resentment, and although put there in good order with a good harvest, yet they went to nothing. Another case about the same time, and under similar circumstances, was giving queens from a distant apiary (all blacks) with very different results; the close of the season found them strong and vigorous, not a moth about them.

Some 30 years ago, a French writer advocated the exchange of brood from a distant apiary, to prevent "in-breeding." Mr. Dadant, on page 270 in the AMERICAN BEE JOURNAL, refers to a case of marked laziness in bees propagated and sold in one locality, all from one colony. He further said, "According to my experience, too close and too prolonged in-and-in-breeding will produce laziness, and give birth to queens whose progenitors are not so sound as should be desired," and had he added that "such a course was a sure road to destruction," he would have come nearer the facts in the case.

I purchased, in 1877, a very fine imported queen from Dr. Brown, of Georgia. Her offspring was pure. I suppressed all drones except from her. From her I reared some very fine queens and drones, but to my surprise, these queens did not produce well-marked workers. The next year (1878), I reared some queens from these; the result was very bad hybrids,—very cross. The third year (1879), to my great satisfaction, as well as my neighbor's, they played entirely out—the worst mongrels imaginable. Now I had no black drones; all drones were from this imported queen and her offspring. I ask,

"was this not a marked case of degeneracy from in-breeding?" I then procured queens from different breeders—reared drones from one, and queens from others, with very different results.

How did man obtain the perfection developed in the various animals under his control? I answer, by taking advantage of this law, with the variation and preserving them, or developing the more perfect, and rejecting the imperfect. Now with no variation, there can be no selection, but happily our great Creator has provided ample provisions by which kindred blood, and the penalty thereof may be avoided, and a better and purer race adorn the many apiaries that exist in our broad and glorious land to the pleasure and profit of all concerned. But permit me here to say, that so long as this dollar-queen business is tolerated, so long may we expect perfection deferred, and a mongrel race flood our country. Why, what may we expect from a stock-raiser to advertise his fine cattle without warrant or guarantee of their purity? Would you purchase of such? Yet thousands of novices are led to believe that they have the "ne-plus-ultra," to their great injury.

Dr. E. Parmlay, New York, maintained that there was not the danger to be apprehended from in-and-in-breeding, that was generally anticipated. The doctor exhibited a photograph of the most celebrated milch cow now in this country, stating that her extraordinary yielding powers had been developed by in-breeding, and that it was a rule among the best stock-breeders to breed in twice and out once; sometimes they breed in-and-out time about. He claimed that climatic influences had more to do with deleterious results than the system of in-breeding with bees. Take, for instance, the human family, and it would be found that some nationalities were not so liable to degeneracy as others. A nervous, excitable people like the Americans would be more likely to degenerate than a stolid phlegmatic people like the Hollanders. According to the theory of parthenogenesis, a queen could not mate with a full brother—the nearest relationship the drone could bear would be that of a half brother, and hence their peculiar natural organization was by nature adapted for breeding in.

An address from C. P. Dadant, of Hamilton, Ill., was next in order, entitled

The Prevention of Natural Swarming.

Among the most desirable improvements to be made in the wide unexplored field of bee-knowledge, is the management of bees in such a way as to produce at will, either bees or honey. One-half of this question has already been solved satisfactorily, it is that which concerns the production of increase in colonies at the expense of honey. Indeed this matter has been so thoroughly ventilated, that it has become a necessity for the older heads to warn the novices against an excess in this line, and notwithstanding these warnings, we daily hear of failures of beginners due to the over-production of artificial swarms in their too great eagerness to quickly become large honey producers.

The other side of the question, and not the least important to the large producer, is far from being so thoroughly solved as the former, and although we see many instances where bees do produce honey without swarming, there are numberless instances where the bees have swarmed again and again, producing a large increase in spite of the efforts of their keeper, whose aim was only the production of honey. All our large producers are anxious to prevent natural swarming and to control all their increase in order to select their breeding stock, and also to prevent any further addition to the number of their colonies, except in a quantity sufficient to cover their winter losses.

In order to find the best means for the prevention of swarming it is necessary to consider the habits of the bee and to act in accordance with their nature. The oldest authorities that write on the subject all agree that bees swarm or prepare to swarm when "a hive well filled with comb can no longer accommodate its teeming population," and they also nearly all agree on the fact that when a colony has made preparations for swarming it is very difficult to prevent their swarming impulse. One thing however, that we do not find stated, though we may have overlooked it, is the fact that bees often prepare to swarm before the hive is full of comb, but only in exceptional cases when the comb in the hive is not yet all occupied. But there are, we think, several

causes of natural swarming. Allow us to lay down a few rules which we will develop afterwards in regard to these causes. The swarming impulse is generally found:

1st. In a colony of bees that contains a large amount of drone comb, in which drones are reared early in the season.

2d. In a colony containing an old queen or a queen who is losing her prolificness on account of age or some other reason, and whom the bees try to replace.

3d. In a colony that has most or all of its comb occupied with honey, brood and pollen, even if that colony has a large empty space left.

4th. In some colonies that have already swarmed a few days previously, or in colonies that have prepared to swarm, even if the colony has been divided, when their intentions were discovered by their keeper.

Let us bear in mind that we must always have in view the nature of the bee, whenever we inquire into this question of swarming, as it is only through their natural instincts that we can control them.

In regard to the first question, nearly all the old box-hive bee-keepers will tell you that a colony that rears many drones is more apt to swarm than one that does not rear any. Bee-keepers however, differ in their explanation of the influence of the drones in this case. Some hold that when the bees intend to swarm, they rear drones largely, to provide for the fertilization of the young queen. Others say that drones are only reared in good seasons and that in such seasons the bees are more apt to swarm. We incline to think that although both of these reasons have weight in the matter, the main influence of the drones on swarming is due to the fact that they bother and annoy the bees with their useless presence, and help to make the colony uncomfortable by their running and tumbling right and left in the busiest time of the day, and especially by generating a considerable amount of heat, without ever helping even to ventilate the hive.

Be this as it may, we can safely say and our readers will agree in this, that to remove all or most of the drone comb to replace it with worker comb, is one of the requirements for the prevention of natural swarming.

The second question in regard to the age of the queen, will perhaps not seem so plain at first sight, and still we consider it as very important. Most bee-keepers know that when a queen loses some of her prolificness, the bees usually build queen-cells to replace her. They do not always wait till she is too old to be of further service, but sometimes try to replace her when she is still vigorous and only somewhat decreasing in her laying capacities.

In such instances if the young queen is reared during a scarcity of honey, they sometimes keep the two queens side by side for weeks and perhaps months, but when this queen-rearing is attempted during the honey months, it is an impetus to the swarming fever. The old queen then leaves with a swarm and this colony having acquired the swarming impulse will swarm again and again, sometimes to the bee-keeper's detriment and also to its own loss. On the other hand if the colony has a young prolific queen which they do not wish to replace, they will not build queen-cells unless other causes force them to it.

The third question is the main one in the case, and the cause of most of the swarming. Not only will a colony swarm when the hive is full of combs, but very often also when all the comb in the hive is full, even if the hive be only partly filled with comb. In this latter case, the cause is undoubtedly to be found in the fact that when the harvest is very plentiful the bees find every corner crowded and have to remain idle in order to digest the honey and transform it into comb. This is an annoyance to them undoubtedly, and they make preparations for swarming. But we have never seen bees swarm when enough empty comb had been provided for them from the beginning of the honey harvest, when the two first requirements had already been complied with. When the bees are allowed to acquire the swarming fever however, from some cause or other, we have never been able to find means to prevent their swarming, no matter how much room was given them and sometimes when divided up in 3 or 4 pieces each of these divisions would cast a swarm and make things only worse. It is, therefore, very important to have these rules complied with before the honey season begins.

For the last 15 years we have kept bees in large hives, larger than the average of bee-hives in the country, and we only had 5 per cent. of natural swarms, except in extraordinary swarming seasons, but until about 4 years ago, we had never furnished our bees with all the comb that they could possibly use in the best honey season. Since that time we have seen extraordinary swarming seasons, among our

box-hive bee-keepers, the present season especially, having more than doubled their apiaries, and we have been enabled to keep the natural swarming to about 3 or 4 per cent.

Discussion helps progress. In the foregoing we only give our experience in the matter and now desire to hear of the experience of others. Such is the aim of this essay.

Hamilton, Ill.

Rev. L. Johnson, Kentucky, does not favor dividing or artificial swarming. When a colony develops a swarming tendency, he removes it to a new stand and places an empty hive on the old one, in which he puts a queen-cell or frame of eggs and larvae.

T. F. Bingham, Abonia, Mich., thinks the giving of empty combs will not prevent swarming—that the size of the hive has nothing to do with swarming.

C. F. Muth, Cincinnati, Ohio, thinks that swarming is easily controlled by extracting from the brood-chamber. In running for comb honey they cannot be so easily controlled at all times.

Rev. L. Johnson does not think the presence of drones has any influence on swarming.

Messrs. Muth and Cook agreed with Mr. Dadant in thinking that drones do exercise an influence.

H. C. Hersperger, Keene, Ky., has seen bees swarm under almost all circumstances; but thinks swarming is mostly attributable to the existence of uncomfortable conditions in the hive. At times, however, the swarming propensity seems almost unaccountable.

Prof. Cook explained his method of measuring the length of the tongue of the honey bee. It is done by placing feed on the surface of a pane of glass, then covering with a surface of wire-cloth, one end being elevated about one-half an inch. By this means he can get the tongue extruded its full length when he suddenly decapitates the bee. By this means he can measure it, with the aid of his microscope, to the exactness of one-thousandth of an inch.

G. W. Demaree, of Kentucky, addressed the Convention on the

Obstacles to Progressive Bee-Culture.

Bee culture, as a science, has made wonderful progress in the past few years, keeping fully up with the improvements of the age. But alas! how few, comparatively speaking, have profited by the flood of light that has flashed from the pens of the many able writers who have espoused the cause of the long-neglected honey bee. Other branches of industry have prospered, and held out their lights to the busy world, which has been grasped and appropriated by it. Bee culture prospers also, but it prospers as a "science," more than as an industry. The part it has played so far, as an industry, is the playing of the part of a "light in a dark place."

A well ordered apiary, managed intelligently, in which the apiarist avails himself of all the helps and improvements used by progressive bee-keepers, is a novelty in most any community.

How can we account for this state of things? Bee scientists are the most communicative class of men of which we have any knowledge, giving away their discoveries and inventions as freely as the air and water. The fault is not here. No branch of industry can boast of a greater number of able writers, better or abler written text books; nor is any branch of industry more ably and skillfully supported by the press than apiculture is. The fault is not chargeable to the weakness of those who have espoused the cause of the honey bee; but rather to the many and formidable obstacles to progressive bee culture as an industry.

Chief among the obstacles to be removed, is the false teaching imbibed by mankind from the cradle to the grave. "Take care! that's a bee; a bee can sting," is one of the first practical lessons taught the child when it first opens its eyes upon the beautiful world. And faithfully does it retain the false lesson through all after life. It is found in juvenile books and magazines, put there by men who are as ignorant as the children they teach. It is one of those anomalous statements which is both true and false. True because the bee "can sting," and false because the idea is conveyed that the bee is ever on the alert to sting somebody, which is false and slanderous to the good and peaceable character of the honey bee. It has done its work, nevertheless, for perhaps 9 out of every 10 persons imagine that the honey bee is their

deadly enemy, and will tell you that "bees always would sting them."

With this state of things existing, and the idea abroad in the land that honey is a luxury wrung from unwilling and vengeful bees, at the risk of being stung to death, we can comprehend why honey is a "luxury," and not a staple article, as it so richly deserves to be. The chief good to be accomplished by the apicultural societies in the land, is to eradicate this unreasonable prejudice, and to establish bee culture on a firmer basis, teaching the people that bee culture is not only not fraught with dangers above other employments, but is both pleasant and profitable. Having accomplished this much, all minor obstacles will vanish away, and the products of the apiary will take their place along with other articles of commerce, and will be "staple" in the fullest sense of the word.

Christiansburg, Ky.

T. F. Bingham, of Michigan, took exceptions to the subject matter of the address of yesterday, on "Making honey a staple product." He thinks when honey shall have become a staple product, and can be secured with the same certainty, and sells at as quotable prices as do the ordinary products of the farm, bee-keeping will have lost its attractiveness for most of those who now pursue it. It is the uncertainty of its production, and the many risks now attending its pursuit, that charms its votaries as does horse-racing with the sportsman or stock-gambling with the speculator.

G. W. Demaree disagreed with the gentleman in his ironical allusion to the subject. In his own county he was overseer of the poor. Every year and every day scores of poor people were supported at the public expense, who could become self-sustaining and honored members of the community if the views suggested by Mr. Coffinberry were carried into effect, making honey a staple product, and its price a reliable quotation, which would be the result of a continuous summer honey bloom.

Rev. L. Johnson said there were thousands of good and willing men. South as well as North, who had lost a leg or an arm, or were otherwise incapacitated from earning a comfortable livelihood at laborious employment, who would hail with joy the opportunity to support themselves. If bee-keeping was made a reliable occupation, with a certain production and a staple price, as was demonstrated by the author of yesterday's paper (Mr. Coffinberry.) These people were now more or less dependent; in the North their government provided pensions for them; in the South their hopes fled with their temporary government, and they depended upon the public charity. In the breadth of the land were hundreds of thousands of women, well adapted for bee-keeping, who are now dragging out their lives, often deprived of the merest necessities of life, who but want to be educated in apiculture, and a steady market to support themselves and contribute millions to the wealth and commerce of the nation.

Mrs. L. Harrison, Peoria, Ill., said that 18 years ago the doctors gave her but three years to live. She has now cheated them out of 15 years, and attributes her good health to her occupation as a bee-keeper.

Prof. Cook illustrated the adaptability of bee-keeping as a lady's occupation by instancing several cases where health had been restored through its pursuit.

On motion, the Convention adjourned till 1:30 p. m.

AFTERNOON SESSION.

The Treasurer, Mrs. Frances Dunham, of Depere, Wis., rendered her annual report, showing a balance in the treasury of \$33.60, after meeting all expenses. Report was accepted.

Balloting for place of next meeting being in order,

D. A. Jones, delegate from the Ontario Bee-Keepers' Association, invited and nominated the next session to be held in Toronto, during the meeting of the Toronto Fair Association.

Wm. Williamson, of Kentucky, seconded the nomination of Mr. Jones.

A. W. Windhorst, of Ferguson, Mo., put in nomination St. Louis, which was seconded.

Dr. J. P. H. Brown, of Georgia, in an eloquent appeal, nominated Cincinnati.

C. F. Muth, of Cincinnati, seconded the motion, and tendered the use of a hall free from rent.

Dr. N. P. Allen, Kentucky, spoke in support of Cincinnati, and also extended an invitation to the members of the Convention to attend the Kentucky State Bee-Keepers' Convention, of which he is President, to be held in Louisville, Oct. 12 and 13.

Nominations declared closed, and Messrs. Poppleton, of Iowa, and Windhorst, of Missouri, were appointed tellers.

An informal ballot being taken, St. Louis received 8 votes, Toronto received 12 votes, and Cincinnati 18 votes.

On the second ballot, Toronto received 12 votes, and Cincinnati 26.

The time of meeting was left to the decision of the Executive Committee, and to be announced through the bee-papers in April next.

An elaborate treatise by C. Dadant, was read, on

The Influence of Honey on Wintering.

Nobody will question the influence of the food on health. Plants cannot thrive in a soil unsuited to them; man, as well as every kind of animal, needs a food easily digested and able to sustain life; bees are not an exception to this rule. Nay, more than man, more than most of the animals, they sometimes eat some kinds of food which, according to circumstances, can sustain their life or cause their death.

You have two colonies of bees entirely destitute of honey; you give one of these colonies for food a comb of good and well ripened clover honey; you give the other colony some molasses. Both colonies will seem to thrive equally well, if you make the experiment in summer, when they can enjoy a daily flight. But if you shut up both hives for two days, when you release them the bees of the one with clover honey will go out to void their intestines without you being able to see their feces. These will be so small, so light in color, that they will fall unnoticed, as in the every day purifying flight of a healthy colony. On the contrary, the bees of the colony fed with molasses will let large drops of dark and foul matter soil all the neighboring objects.

If, in lieu of the two days' confinement you prolong it for eight days, then, at the opening of both entrances, the bees of the colony with clover honey will act the same as after their two days' confinement, while the bees of the colony fed with molasses will crawl out, discharging their feces around the entrance; some, if not the greater part of them, will have their abdomens so much distended that they will be unable even to void their contents. These poor bees will crawl everywhere around their hive, and perish on the ground.

I can give another illustration of the influence of honey on bees during a close confinement: For years the importation of Italian queens into this country was attended with much loss; sometimes half of a shipment were alive. Such a result was then considered as a lucky one, for most of the time hardly one queen was received alive, to show that the bees were not all dead when put in the boxes.

Of course, such a business was far from being profitable, and more than one enterprising bee-keeper was deterred from continuing it, after a few trials.

What was the cause of such ill success? The main, if not at times, the only cause, was the quality of the honey given to the bees for food during the journey.

In Italy bees gather largely from a diversity of plants. Persuaded that success in that branch of business was possible, I began, with my shipper, a series of experiments to ascertain which kind of honey was the best for such a long confinement. After several careful experiments during two years, we succeeded so well in the selection of honey that we have many times received boxes containing queens which had barely a dead worker bee, after a journey of 22 days. Then our importing business became a success, and paid back all the money lost in seven years of unsuccessful importation, giving handsome profits besides.

Both these illustrations show what happens during the winter to the bees, according to the quality of the food that they have to eat.

Every bee-keeper has noticed that when, after winter, we find some of our colonies dead, if they have not starved or smothered they have perished with diarrhea,

and that this same malady, if we can call it a malady, has also made sad havoc in the population of some of our colonies, while some others have passed through the winter safely. I have even noticed that in such a diversity of fate, a few colonies were so free of diarrhea that I was unable to see a drop of foul matter around their hives.

Now let us see what had produced such a difference in the condition of these colonies. The indispensable food for bees is sugar, and chemistry shows that the most easily and most thoroughly digested form of sugar is cane sugar. Honey contains sugar in two different forms—cane and grape sugar. Some plants give honey with more cane, others with more grape sugar, consequently a honey containing the most of cane sugar, such as clover honey, will prove more nourishing than fall honey, which contains more grape sugar, and leave, besides, in the intestines of the bees a smaller quantity of undigested residues. Our bees in winter are confined for weeks, even for months, and it is easy to understand how the colonies with good honey, having less residues in their intestines, were able to remain in good health; while the colonies which had a poor quality of honey to eat, perished more or less rapidly, according to the quality of this honey—the bees with juice of fruits or honey-dew being ahead.

When the honey is stored in cells partly filled with pollen, the bees eat some of this pollen and their intestines are readily filled up. The same result follows when the honey is not sealed, for, not only is it watery, but the quantity of water that it contains is increased by the property that it possesses to absorb moisture. This water accumulates in the intestines of the bees, and if they are prevented by cold from voiding it, they become uneasy and perish.

Now that we understand this, one of the causes of sickness in bees during winter, let us remember:

1. Not to remove in summer all the spring honey that the bees have stored, leaving in the hives a sufficient reserve for the coldest part of winter.

2. To remove all the combs containing honey stored in cells partly filled with pollen. These combs are easily found on account of their opacity. They are splendid for bees in the spring, for this mixture will incite breeding.

3. To remove all the unsealed honey that the bees will be unable to consume before winter.

4. To remove also the honey-dew, when there is any.

5. To prevent bees going to the cider presses, or to remove the cider stored in the hive. This liquid always remains unsealed.

6. To replace with good sealed honey, or with good thick syrup all the honey taken out, so as to give to the bees sufficient provisions. The best syrup is made with one pound and one half-ounce of water for two pounds of granulated sugar.

Of course, such precautions are not indispensable every winter; for a bad food can keep bees alive if they have frequent flights. Besides, as it is very difficult to follow my advice to the letter, I have been accustomed to awake my colonies in winter every day when I foresee that the thermometer will reach 45° in the shade. This precaution is especially necessary with chaff hives, for the sun cannot easily warm them inside. The bees, thus awakened, enjoy a good flight, and return with empty bowels, ready for another confinement.

Hamilton, Ill.

O. O. Poppleton thinks as a rule, his bees do as well in winter on buckwheat or other full honey, as on white clover. The main point is to have well ripened honey.

D. A. Jones prefers the basswood honey for wintering.

Dr. N. P. Allen prefers white clover, or well ripened fall honey.

The Secretary read a paper from Dr. W. R. Howard, of McKinney, Texas, on "Wintering Bees in Texas." [This may be found on page 299.—Ed.]

G. W. Demaree, Kentucky, thinks the practice of crowding bees in the hive as detrimental to successful wintering; if it crowds his bees to put them on six frames, he will give them eight—putting the unoccupied combs at the sides.

C. F. Muth has wintered colonies as well on twenty frames as on ten. Last winter two colonies were left on twenty frames, and they came through all right. He thinks the great loss during winter is caused by insufficient ventilation.

Mrs. L. Harrison, of Illinois, inquired if it was necessary to place an empty comb in the center of the brood chamber for wintering?

The question was answered by several in the negative.

The Secretary read a communication from Dr. C. C. Miller, Marengo, Ill., President of the Northwestern Bee-keepers' Society, on

Swarms vs. Comb Honey.

The principal value of a paper at a convention is the discussion which follows it, so I choose a subject on which I earnestly desire light, rather than one upon which I fancy I can give information. My sole business is in raising honey to sell, and the market obliges me to work mainly for comb honey. As every swarm that comes out means just so much less honey in boxes, any hint that will help me to prevent swarming will be of value. Of course I will be told, "give the bees plenty of room;" but sometimes they will swarm in spite of abundant room, and may there not be some little trick that some of you have discovered in the manner or time of giving the room, that may make some difference? I think I have gained something by getting the bees started early on as many sections as I think they will likely finish, for it has rather seemed to me that bees were not so likely to swarm, if by any means their whole energy could be directed toward the storing of honey. The advocates of side-storing, will claim that bees will commence quicker on sections, if the sections be at the side of combs on which they are already at work, and for some years I have tried to secure the advantages of side-storing without its objections, by simply placing in the super, between the sections, a frame taken from the brood chambers, of either brood or honey, and I don't know which is best. This frame is moved from one part of the super to another every 3 or 4 days, and whenever it is placed there, the bees are sure to commence work on the sections.

How much room should there be in the brood chamber? Mr. Doolittle thinks 7 Langstroth frames; Adam Grimm used 8. This season I have used from 7 to 10, and I confess I have come to no very definite conclusion, but I doubt if I shall ever use as high as 10 again. I rather incline to the opinion that, as a rule, I shall have 8 frames in a hive, putting one of them in the super; will leave 7 in the brood chamber during the storing season, and at the close, or near the close of the storing season, the 8th frame will be returned to the brood chamber filled with clover honey. But will not the bees be made more likely to swarm if they have only 7 brood frames? Who can tell us the most profitable number of Langstroth frames to be left entirely to the use of the queen? And if she has less room than her utmost ability to occupy, will it invariably promote swarming?

But when swarms do come, what shall be done that the storing in boxes may be the least interfered with? The plan given by J. J. Taylor, in September "Gleanings" appears good, but I like to place my hives in regular numerical order, and dislike very much to change their location. The main features of his plan, is to have the colony in a box or empty hive, keep them cool and dark till after sunset, then shake down the bees from the old hive, and place the new colony in front of a hive in a new location, and let them run in, giving them the frames from the old hive after cutting out all queen cells. Now if this plan will let bees work with the vigor of new colonies, I suppose the inconvenience of changing location should not be considered.

Mr. Doolittle's plan is to cage the queen at swarming and put her in the hive, 5 days after swarming, cut out queen cells, and 5 days later cut out queen cells again and liberate the queen. I have lost a good many queens trying to improve upon this plan, but have failed to better it, unless it be that I generally give the queen for 10 days to some nucleus or queenless colony, instead of keeping her caged.

Will the bees work with more or less vigor on account of the presence of the caged queen?

I hope we may have the benefit of the experience of others in combating swarms for often it happens that in a discussion, a single sentence may throw more light on a subject than many pages of a long-winded essay.

Marengo, Ill.

The above paper was followed with considerable desultory debate, which had but little reference to the subject treated upon.

Dr. L. E. Brown, of Kentucky, here announced that a committee of reception had gone to the depot to meet Mr. Thomas G. Newman, editor of the AMERICAN BEE JOURNAL, who was expected on the train then due. Dr. Brown alluded to the eminent services of Mr. Newman to further the cause

of apiculture in North America, that to his labors more than those of any other, could the North American Bee-keepers' Society attribute its success, and that he had done more than any man living to create a market for honey, and to make it a marketable commodity. He moved that when the committee returned they and their guest be received by the Convention standing.

Dr. Allen, of Kentucky, moved to amend by adding that a recess of ten minutes be also taken to allow members an opportunity to greet Mr. Newman.

Which motions were carried unanimously, amidst much enthusiasm.

The reception committee here made their entrance, escorting Mr. Newman who was received by the Convention standing, when a recess of ten minutes was taken.

On being called to order, Dr. E. Drane, of Eminence, Ky., addressed the Convention on

How to Make Bee-Keeping Pay.

Some 5 or 6 years since I determined to make bee-keeping pay if possible. I had a fondness for bees and especially for honey. I had never read any work on apiculture, but concluded that there must be some standard works treating of bee-keeping; began to inquire for such, and learned that there was a paper published at Chicago, called the AMERICAN BEE JOURNAL. I immediately wrote a postal card to the editor and received a specimen copy in which the standard works on apiculture were advertised; also several other papers devoted to bees and the production of honey and the sale of bee-keeper's supplies.

I knew I had struck a bonanza for when a man is determined to obtain knowledge upon any subject, just give him access to the standard writings on that subject and he can soon know all that is known or unknown about the business. I subscribed for the BEE JOURNAL, "Gleanings in Bee Culture"—procured Langstroth's work and Cook's Manual of the Apiary and several other works on bees and honey, read myself full of bee theory—went to see all of my friends or acquaintances who kept bees and who were supposed to understand scientific bee-culture. The idea seemed to prevail with them that everything depended upon having the right kind of a hive—they tried every kind—some had moth-traps and hives with frames were numerous, but never a frame could they move, the combs were crooked and crossed. No one offered to lift out a frame and show me the queen, but I was often invited to take a peep through glass as though it were a great treat to see bees under glass, hence I concluded that if my friends had ever understood scientific bee-culture, they had stood still until the wave of progress had gone by and left them 30 years behind. Talk to them about controlling swarming, extracting honey or rearing queens! Oh! that is all a humbug, they would say.

I therefore had to rely on my books and papers—making careful selection of the method that seemed most approved of and practiced by the great bee kings, who annually made reports of large yields of honey who had honey to sell by the ton—I studied their ways and endeavored to take lessons of them, I bought an extractor, adopted the Langstroth hive, had comb honey stored in prize sections, packed 12 in a crate and glassed the crate, kept extracted honey in 1 and 3 lb. jars in the stores around, and comb honey in crates, and never offered to undersell the market. I ask and get top prices and have learned to keep honey in prime condition (I never ship any in bad order) and I cultivate a home market by trying to keep honey for sale all the year round. Perhaps I might as well say that I have about twice as much extracted honey as comb, and find an increasing demand for it. I recommend all to buy extracted honey.

1st. Because it is cheaper and is sweet as comb honey.

2d. Because I can obtain larger yields of it than of comb honey and can make more money producing it, and I use it myself all the time.

For several years I have made careful memoranda of the time of blooming of all the plants, trees and flowers on which bees forage and the length of time they last and amount of honey and pollen the bees obtain from each, which enables me to know with reasonable certainty what the bees are doing or can do, according to the state of the weather, and the prevailing forage, either present or prospective. In proof of which, I attended to two apiaries away from home this year and had not a single swarm, and only visited them

once a week, and occasionally at longer intervals. Had I never studied the subject of bee forage I should have been in continual doubt and uncertainty.

Let no one flatter himself that he can learn bee-keeping in a day. Each season imparts new lessons, and it seems as if I were just beginning to know the cause of many things about bees and honey, and I do not hesitate to say that I firmly believe that I can make more money out of bees and honey with a capital of one thousand dollars, than average farmers do on five times that amount, taking the seasons as they come. But I wish to persuade no one to embark in the business for I know of no calling that is accessible to so many, and at which so few make money.

T. F. Bingham, Michigan, thought the address worthy of the highest encomiums, and that Mr. Drane should have the thanks of the Convention for crowding so much practical advice and correct conclusions in such a small and comprehensive space.

President Cook stated that pollen was in many cases injurious to bees in winter, as it had a tendency to unseasonable breeding, and hence was the cause of much spring dwindling.

Dr. J. P. H. Brown, Georgia, has found pollen very beneficial in the latitude of Georgia, but it might not answer so well in a Northern climate.

C. F. Muth, Ohio, thinks pollen is a great benefit to bees in his latitude, and he always gives them pollen combs if he has them, in March.

D. A. Jones, Ontario, thought Prof. Cook's ill-success with pollen was attributable to other causes. Mr. Jones said he never discriminated against pollen-combs in preparing the bees for winter.

C. F. Muth said he wanted brood in his hives by March 1, at the latest.

Adjourned till 7:30 p. m.

[Concluded next week.]

The Northwestern Bee-keepers' Association will meet in Chicago, on Tuesday and Wednesday, October 25 and 26. All bee-keepers are cordially invited to attend. It is desired to make this one of the most interesting conventions ever held in the United States. C. C. MILLER, M. D., Pres. C. C. COFFINBERRY, Sec.

Owing to the fact that the time of the regular meeting of the Union Bee Association, at Shelbyville, Ky., conflicts with the time fixed by the executive committee, to hold the National at Lexington, the meeting of the Union, at Shelbyville, has been postponed till the 20th of October.

G. W. DEMAREE, Sec. Christiansburg, Ky., Sept. 3, 1881.

The Rock River Valley Bee-keepers' Convention, will be held at Monroe Center, on the third Tuesday in October. We hope a good attendance will be the outcome, and the bee interest revived.

D. A. CIPPERLY, Sec.

The Western Michigan Bee-keepers' Association will meet in Berlin, Ottawa, Co., Mich., Thursday, Oct. 27, 1881, in Huntley's Hall, at 10:30 a. m. All interested, are cordially invited.

WM. M. S. DODGE, Sec. Coopersville, Mich., Aug. 29, 1881.

The Southwestern Wisconsin Bee-keepers' Association will hold its next meeting in Platteville, Grant Co., Wis., Nov. 30, 1881.

N. E. FRANCE, Sec., Platteville, Wis.

The Michigan State Bee-keepers' Association, will convene at Battle Creek, on Thursday, Dec. 8, 1881. We have reason to expect one of the largest and most interesting meetings we have ever held. Let all arrange to be present. All District Associations should send delegates. Each person should come with their best experience in their hands, ready to hand it over to the others of the fraternity. It is hoped that all will bring the fullest report possible from their region. Commutation rates are expected on railroads.

A. J. COOK, Pres. T. F. BINGHAM, Sec.

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The Chicago District Convention will be held at the office of the BEE JOURNAL, on Oct. 25, 26, and a cordial invitation is extended to all bee-keepers who can, to attend. Arrangements for hotel accommodation and table board will be made known at this office. Let there be a general rally.

The Rev. L. L. Langstroth was unable to attend the National Convention, his health being too poor to allow of his leaving home. Learning of his needs, several of his friends started a donation fund for him, and many of the queen bees and implements were donated, to be sold and the proceeds to be added to the fund. Any one wanting a pure Imported Cyprian queen of the Jones importation, or one of "Davis' Patent Honey Carriage Revolving Comb Holder, Tool Box and Recording Desk, Combined," can obtain them and at the same time do a kind and generous act to our friend Langstroth. Apply at this office for the queen or Honey Carriage, and any one desiring to do so, can send any amount to be added to the sum already collected.

Badges.—Bee-keepers going to fairs should wear a badge with a gold bee on it. It will serve to introduce him to other bee men. We will send them for 10 cents, post paid.

Kendall's Spavin Cure is highly recommended by Prof. Williams, the wonderful horse tamer. 41.

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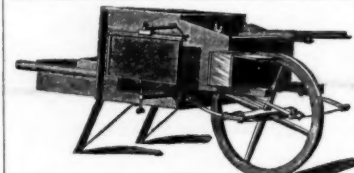
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